



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1525G
UNIQUE ID NUMBER: 20PW129
COMBUSTOR: TALON X
ENGINE TYPE: TF

BYPASS RATIO: 11.1
PRESSURE RATIO (π_{00}): 38.7
RATED THRUST (F_{00}) (kN): 108.5

REGULATORY DATA

** DATA SUPERSEDED **

SEE FOLLOWING UID FOR REVISED DATA:

01P20PW182

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.3	23.6	41.7	4.4
AS % OF ORIGINAL LIMIT	2.0	20.0	36.0	19.0
AS % OF CAEP/2 LIMIT (NO _x)			44.0	
AS % OF CAEP/4 LIMIT (NO _x)			49.0	
AS % OF CAEP/6 LIMIT (NO _x)			55.0	
AS % OF CAEP/8 LIMIT (NO _x)			62.0	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
x DEDICATED ENGINES TO PRODUCTION STANDARD
- OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

- OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.790	0.00	0.00	26.00	3.4
CLIMB OUT	85	2.2	0.650	0.00	0.00	20.50	2.0
APPROACH	30	4.0	0.230	0.10	1.80	10.40	0.8
IDLE	7	26.0	0.080	0.10	16.70	6.00	0.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			292	18	2084	3903	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.2	19.2	36.0	3.4
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.1-0.2	19.1-19.3	35.6-36.3	3-4.3

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	102-103.3
TEMPERATURE (K)	272-278.1
ABS HUMIDITY (kg/kg)	0.00122-0.00221

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	17.8-18.4

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: Mirabel Aerospace Centre - Quebec
TEST DATES: 25/03/2018-26/03/2018

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Data from Certification Report PWA-11600
2. Block C combustor
3. Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation,
- if information is not available)